Peerless RPS

The only competitively-priced system
with a full line of processors
...including a 43-inch machine!

To obtain more data on RPS
contact:

PRODUCT MANAGER
Engineering Reprographics
PEERLESS PHOTO PRODUCTS, INC.
Shoreham, L. I., N. Y.

AN INFORMATION GUIDE TO GREATER EFFICIENCY, ECONOMY AND QUALITY IN PHOTOGRAPHIC REPRODUCTION

See the light...

WITH

RPS

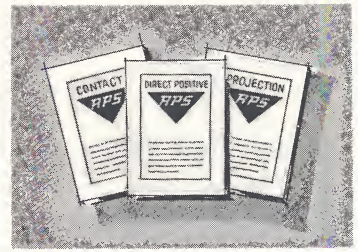
RAPID PROCESSING SYSTEM

PEERLESS
PHOTO PRODUCTS, INC.
Shoreham, L. I., N. Y.

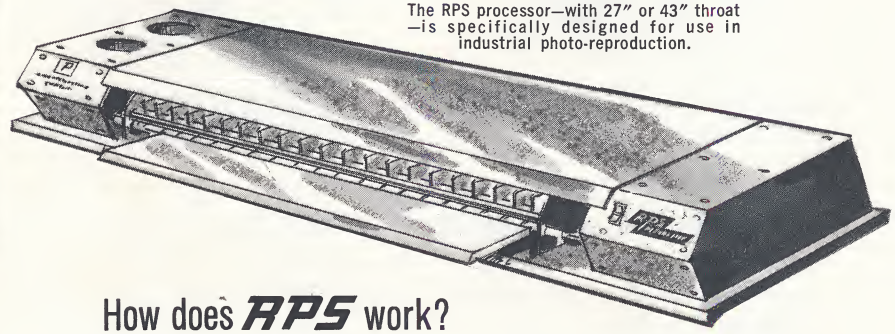
What is RPS?

RPS means Rapid Processing System. This system, developed by Peerless Photo Products, Inc., represents an entirely *new concept* in engineering reproduction; the result of years of research and study to properly mate new types of silver photographic materials and chemicals with a precision-engineered processor. RPS takes photo-reproduction out of the darkroom. Now the reproductionist can make silver halide prints within seconds—in room light—without sacrificing any of the high quality so necessary to engineering reprographics.

RPS uses two chemicals—one to activate development, the other to permanize the image.



The RPS processor takes its own revolutionary line of Contact, Direct Positive and Projection emulsions on both paper and vellum bases.



The RPS processor—with 27″ or 43″ throat—is specifically designed for use in industrial photo-reproduction.

How does RPS work?

The RPS system is made up of three highly compatible components—processor (27″ or 43″ throat), chemicals and photo-sensitized material. The processor is specifically designed for use in industrial photo-reproduction and processes a line of materials including a .003″, paper and a .003″, vellum base at rates up to 10 foot per minute. The processor's controlled metering permits the exact quantity of chemical necessary to develop the emulsion you need. You *don't* dunk, drown and then squeegee the prints dry. Prints are ready for use 60 seconds after processing. Chemicals are exhausted through normal use. There is no "drip-back" contamination.

Here's more data on the paper and chemicals used in RPS

The RPS processor uses a revolutionary line of silver halide products made by Peerless. These products, in paper and vellum bases, are:

1. **RPS Direct Positive, Extra Thin (.003″)**
   RPS Direct Positive, Vellum (.003″)
2. **RPS Contact, Extra Thin (.003″)**
   RPS Contact, Semi-Gloss (.004″)
3. **RPS Projection, Extra Thin (.003″)**
   RPS Standard (.004″)

RPS DIRECT POSITIVE produces rapid positives directly from original drawings by exposure to yellow light in any rotary printer, vacuum printer or vacuum frame.

RPS CONTACT is a slow roomlight handling emulsion for making negatives from originals or positives, and positive prints from negatives. The Extra Thin base is ideally suited for intermediates where rapid reprinting is desirable. The Semi-Gloss base is designed for negative work where opaquing, scribing and transparentizing is required prior to making a new second original or a maximum-quality Standardized Master.

RPS PROJECTION is a medium-speed and contrast projection-type emulsion intended for microfilm retrieval where maximum-quality second originals or intermediates are required. The Standard base is also ideal for normal or hard copy prints.

Two chemicals are used—one to activate development, the other to permanize the image.

RPS is Simple

Any person who can "flip a switch" and feed paper into a wide slot can place exposed RPS paper in the processor. The prints are ready for use 60 seconds after processing.

RPS is Fast

Very fast! Production time may be reduced as much as 80%. The reprographic processor makes this possible with its time-saving design. Second originals and intermediates are ready for use 60 seconds after processing.

WHEREVER USED RPS WILL DO THE JOB

For the *in-plant operation,* RPS will eliminate the darkroom, permit decentralization of the reproduction activities and increase production capability. The *small plant operation* will now be able to afford photographic quality. For the first time, silver quality will not involve huge investments or costly outside reproduction service. The *commercial house (blue printer)* will find RPS an ideal medium. It will enable him to increase production, speed up delivery and use his darkroom solely for special photographic work.

Some Other Important Facts About RPS

PRINT EXPECTANCY. RPS prints have outstanding use life. If it is deemed advisable to assure retention of print life, the print may be fixed in hypo either before or after its initial use.

SPACE REQUIREMENTS. Valuable floor space requirements may be reduced as much as 90%. The processor takes up no more space than an average drafting table. The sensitized paper can be exposed and processed in the normal illumination of a drafting room. The convenience and accessibility of the RPS system, plus its speed of reproduction practically eliminate the draftsman's "waiting" time.

RPS

Offers

Important Advantages to the 6 Major Categories of Reproduction

1. ***INTERMEDIATES.*** Now negative and/or positive intermediates can be prepared right in the drafting room in a matter of seconds to permit rapid multiple print reproductions. The original drawings no longer need be removed from the engineering drafting department. Merely make an RPS intermediate and send it to the service function doing your major volume reproduction work.

2. ***RESTORATION.*** The growth of industry and business has thrown increasing work loads on drafting and engineering departments. Combined with the demands of modern microfilming, this necessitates better, more accurate methods of upgrading and revising the many drawings required to produce even a single product. Photographic techniques, specifically the RPS system, can now facilitate more rapid production of drawings and eliminate tedious routine work loads from engineering and drafting departments.

3. ***STANDARDIZED MASTERS.*** Many companies today are so advanced in their microfilm and drafting programs that they feed only new drawings into their reproduction systems. These drawings *should* be excellent for reproduction purposes. In today's large drafting and design departments, however, it is rare for two draftsmen to have the same "touch." Drawings show a great variation in pencil line density. Microfilm made from such drawings may suffer from poor retrieval capability plus an inability to meet D.O.D. specs consistently.

RPS, however, makes Standardized Masters from new drawings, quickly and economically, changing inconsistent pencil line densities into maximum-density black lines ideal for microfilm reproduction. And RPS does it right in the drafting area in room light!

4. ***PHOTO DRAWING.*** "One picture is worth a thousand words." This familiar saying takes on new meaning when you apply it to the engineering drafting field—where a properly used photograph can show more than a thousand lines or symbols. A photo drawing is, in essence, the result of photographs that have been screened, detailed (call-outs) and combined with a drawing format on a photographic drafting material. When reprinting by diazo is not a necessity, continuous tone negatives or positives can be printed directly on a photo-sensitized drafting medium without making a halftone.

Photo drawings have many advantages. They not only cost less to prepare, but they also permit more visualization and understanding than ordinary drawings. Changes or modifications in equipment can be quickly illustrated with a photo drawing prepared from a new photograph. On occasion, as in map or survey work, a photograph may be combined with a line drawing for maximum visual clarity that further insures accurate interpretation. Photo drawing is done faster and less expensively with the Peerless RPS.

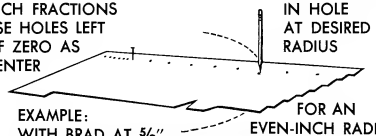
5. ***PHOTO DRAFTING.*** The old-fashioned procedure of redrawing and tracing to produce a new or revised drawing is no longer practical in today's high-speed production activities. Photo intermediates or second originals combined by paste-up or scissor drafting can now be used to produce complete, accurate drawings in less than one-quarter of the time it takes to trace or redraw. Photo drafting also reduces checking time. (Since the photograph is a faithful reproduction of the original, only the detailing need be checked.) RPS enables photo drafting to be done more quickly and economically, without loss of engineering drafting time.

6. ***MICROFILM RETRIEVAL.*** Where a multiplicity of work prints is required, retrieval must be achieved on a maximum-quality reproduction medium. Only silver halide can insure maximum-quality results. With an RPS processor next to your projection equipment, you can make good intermediates or second originals in seconds.

COMPASS AND RULE

FOR INCH FRACTIONS USE HOLES LEFT OF ZERO AS CENTER

SWING PENCIL IN HOLE AT DESIRED RADIUS

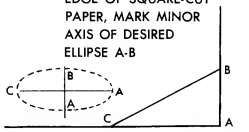


EXAMPLE: WITH BRAD AT 5/8" PENCIL AT 6" RADIUS IS 6 5/8"

FOR AN EVEN-INCH RADIUS, INSERT BRAD AT ZERO CENTER

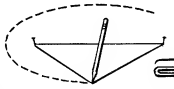
DRAWING ELLIPSES

1 ON A SQUARE, OR EDGE OF SQUARE-CUT PAPER, MARK MINOR AXIS OF DESIRED ELLIPSE A-B



2 MARK LENGTH OF MAJOR AXIS FROM B TO C

3 DRIVE TWO BRADS DISTANCE A-C APART



4 TIE A LOOP EXACTLY HALF LENGTH OF A-C PLUS B-C

5 WITH LOOP ON BRADS, SWING PENCIL INSIDE IT TO DRAW ELLIPSE

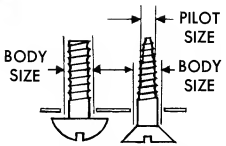
TAP DRILL SIZES

TAP	DRILL NO.	DECIMAL SIZE	TAP	DRILL NO.	DECIMAL SIZE
4-36	44	.086″	1/4″-20	7	.201″
4-40	43	.089″	1/4″-28	3	.213″
5-40	38	.101″	5/16″-18	F*	.257″
6-32	36	.106″	5/16″-24	I*	.272″
6-40	33	.113″	*11/64″ drill may be used		
8-32	29	.136″	3/8″-16	5/16″	.312″
8-36	29	.136″	3/8″-24	Q*	.332″
10-24*	25	.150″	*21/64″ drill may be used		
10-32*	21	.159″	7/16″-20	25/64″	.390″
*same as 3/16″-24 and 3/16″-32			1/2″-13	27/64″	.422″
12-24	16	.177″	1/2″-20	29/64″	.453″

Popular Science 20-IN-1 SHOP GUIDE

1255 PORTLAND PLACE
BOULDER, COLORADO 80302

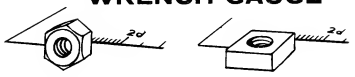
BOLT AND SCREW SIZES



FIND SMALLEST HOLE ABOVE SCREW DROPS INTO. DON'T FORCE.

SCREW BODY NUMBER	BODY DRILLS: MACHINE SCREWS	BODY DRILLS: WOOD SCREWS	PILOT DRILLS: IN SOFT WOOD	PILOT DRILLS: IN HARD WOOD
4	No. 31	1/8″	1/16″	5/64″
5	No. 29	9/64″	5/64″	3/32″
6	No. 27	9/64″	5/64″	3/32″
7	—	5/32″	3/32″	7/64″
8	No. 18	11/64″	3/32″	7/64″
9	—	3/16″	7/64″	1/8″
10	No. 9	3/16″	7/64″	1/8″
12	No. 2	7/32″	1/8″	5/32″

BOLT-HEAD, NUT, WRENCH GAUGE



READ ACROSS-FLATS AND WRENCH SIZE HERE

PENNY-NAIL GAUGE

READ PENNY NAIL SIZE HERE

INCHES 1/4 3/8 1/2 5/8 3/4 7/8 1″ 7/16 9/16 11/16 13/16 15/16 2d 3d 4d 5d 6d 7d 8d 9d 10d 12d 16d 20d

MILLIMETER AND CENTIMETER RULE

SCREW THREADS PER INCH

MATCH THREADS TO LINES

USEFUL FORMULAS

TO FIND	DO THIS
Circumference of circle	Multiply diameter by 3.1416
Area of a circle	Multiply radius by itself; multiply result by 3.1416
Area of a triangle	Multiply base by half the height
Speed of a driven shaft	Multiply diameter of driving pulley by its speed; divide by dia. of driven pulley
Diameter of driving pulley	Multiply diameter of driven pulley by its desired speed; divide by speed of driving pulley

PIPE SIZES

NOMINAL SIZE	INSIDE DIA.	OUTSIDE DIA.
1/8"	17/64"	13/32"
1/4"	23/64"	35/64"
3/8"	1/2"	43/64"
1/2"	5/8"	27/32"
3/4"	53/64"	1 3/64"
1"	1 3/64"	1 5/16"
1 1/4"	1 3/8"	1 21/32"
1 1/2"	1 39/64"	1 29/32"
2"	2 1/16"	2 3/8"
2 1/2"	2 15/32"	2 7/8"

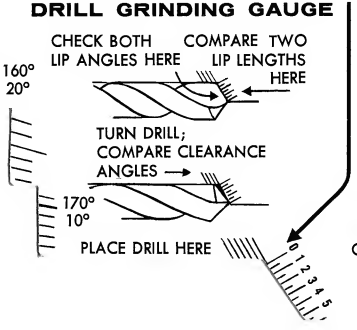
SHEET-METAL THICKNESS

(Inch, decimals and nearest fractions)

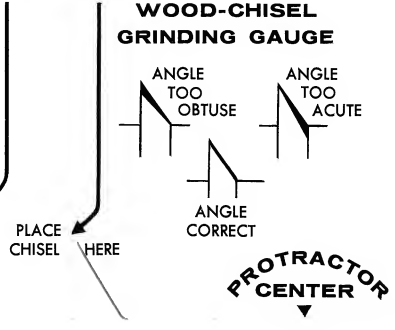
GAUGE NO.	UNCOATED CARBON AND LOW-ALLOY STEEL*	ALUMINUM, BRASS AND COPPER
28	.015 (1/64)	.012
26	.018	.016 (1/64)
24	.024	.020
22	.030	.025
20	.036 (1/32)	.032 (1/32)
18	.048 (3/64)	.040
16	.060 (1/16)	.051
14	.075 (5/64)	.064 (1/16)
12	.105 (7/64)	.081 (5/64)

* Galvanized and other coated steel slightly thicker

DRILL GRINDING GAUGE



WOOD-CHISEL GRINDING GAUGE



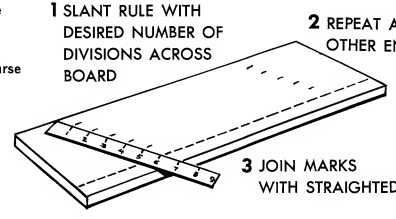
COATED-ABRASIVE GRIT SIZES

	GARNET, ALUMINUM OXIDE, OR SILICON CARBIDE	EMERY	FLINT
VERY FINE	600, 500		
	400	(10/0)	
	360		
	320	(9/0)	
	280	(8/0)	
	240	(7/0)	
	220	(6/0)	
			Ex. fine
FINE	180	(5/0)	3/0
	150	(4/0)	2/0
	120	(3/0)	Fine
MEDIUM	100	(2/0)	0
			1/2
	80	(0)	1 Medium
	60	(1/2)	1 1/2
COARSE	50	(1)	2
			Coarse
	40	(1 1/2)	2 1/2
	36	(2)	
VERY COARSE	30	(2 1/2)	3 Ex. coarse
	24	(3)	
	20	(3 1/2)	
	16	(4)	
	12	(4 1/2)	

LUMBER MEASURE

SIZE (INCHES)	LENGTH IN FEET				
	10	12	14	16	18
1 by 2	1 2/3	2	2 1/3	2 2/3	3
1 by 3	2 1/2	3	3 1/2	4	4 1/2
1 by 4	3 1/3	4	4 2/3	5 1/3	6
1 by 6	5	6	7	8	9
1 by 8	6 2/3	8	9 1/3	10 2/3	12
1 by 10	8 1/3	10	11 2/3	13 1/3	15
1 by 12	10	12	14	16	18
2 by 4	6 2/3	8	9 1/3	10 2/3	12
2 by 6	10	12	14	16	18
2 by 8	13 1/3	16	18 2/3	21 1/3	24
2 by 10	16 2/3	20	23 1/3	26 2/3	30
2 by 12	20	24	28	32	36
3 by 10	25	30	35	40	45
3 by 12	30	36	42	48	54
4 by 4	13 1/3	16	18 2/3	21 1/3	24
6 by 6	30	36	42	48	54

DIVIDING A BOARD INTO EQUAL PARTS



ALIGN THIS EDGE • MARK CENTER • MARK ANGLE TOP OR SIDES

BOARD FEET

PEERLESS PHOTO PRODUCTS, INC.
Route 25A • Shoreham, Long Island, New York 11786 • Cable address: Peershore, Shoreham
MANUFACTURERS OF PHOTOSENSITIVE MATERIALS • Tel: area code 516 SHoreham 4-2817

Gentlemen:

We sincerely appreciate the interest you have shown in the new Peerless R. P. S. Program and its importance to the Reprographics field.

The attached R. P. S. Handbook and Price Sheet will give you a more complete idea of how you will lower production time and costs and still enjoy the quality of silver halide photographic materials.

Several well-known engineering supply firms have been selected as dealers for R. P. S. and are now completing their orientation and training. A representative of one of these companies will be in touch with you shortly to arrange for a demonstration.

The 27" Processor will retail at $1295.00 and the 43" Processor at $1595.00. Our full line of sensitized materials will accommodate a wide variety of applications with savings of up to 80% in processing time - and in roomlight conditions.

If you desire any other information prior to our visit, please do not hesitate to contact us at once.

Sincerely yours,

PEERLESS PHOTO PRODUCTS, INC.

Harold J. Briggs

Harold J. Briggs
Executive Vice President

Enclosure